

Atty Docket No: 1014-11  
Response t May 29, 2003 Office Action

Application S/N:10/017,963  
Date of Response: October 29, 2003

AMENDMENTS TO THE SPECIFICATION

Please replace the fourth paragraph on page 7 beginning with "1) A chiral element may be produced by twisting...." and continuing onto page 8, with the following amended paragraph:

"1) A chiral element may be produced by twisting one or more heated optical fibers as disclosed in the co-pending commonly assigned U.S. patent ~~application~~ applications entitled: "APPARATUS AND METHOD FOR MANUFACTURING PERIODIC GRATING OPTICAL FIBERS" S/N: 09/925,590; "CHIRAL FIBER GRATING" S/N: 10/097,024, and "APPARATUS AND METHOD FOR FABRICATING CHIRAL FIBER GRATINGS" S/N: 10/099,623; ~~and in the co-pending commonly assigned U.S. provisional patent applications entitled "Helical Fiber Bragg Grating", and "Apparatus and Method for Fabricating Helical Fiber Bragg Gratings"~~, which are all hereby incorporated by reference in their entirety;"

Please replace the third paragraph on page 8 beginning with "3) A chiral element may be produced by imposing modulation of ...", with the following amended paragraph:

"3) A chiral element may be produced by imposing modulation of the effective refractive index in an optical fiber by writing a single or a double helix pattern on the external surface of the fiber. For example, a periodic structure, such as a

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groove may be formed on its surface. This may be accomplished via laser ablation or by the addition of dielectric material in a helix on the outside of the fiber. The helical dielectric about the fiber can also be deposited and subsequently developed. These techniques are disclosed in the above-incorporated ~~provisional~~ U.S. patent applications "HELICAL FIBER BRAGG GRATING", and "APPARATUS AND METHOD FOR FABRICATING HELICAL FIBER BRAGG GRATINGS";"

Please replace the fourth paragraph on page 8 beginning with "4) Another way of producing a chiral element involves imposing ....", with the following amended paragraph:

"4) Another way of producing a chiral element involves imposing a helical or a double helical modulation of the refractive index at the core of an optical fiber as disclosed in the co-pending commonly assigned U.S. patent application entitled: "APPARATUS AND METHOD OF MANUFACTURING CHIRAL FIBER BRAGG GRATINGS" S/N 10/020,678; and"